Savannah River Site
Citizens Advisory Board (CAB)

2006
ANNUAL WORK PLAN

Final
February 16, 2006

INTRODUCTION

The Savannah River Site (SRS) Citizens Advisory Board (CAB) is composed of 25 individuals from South Carolina and Georgia. The board members reflect the diversity of the population affected by SRS. The members, who can serve up to three consecutive two-year terms, represent business, academia, labor, local government, environmentalists, special interest groups, and the general public. Two of the members specifically represent economically disadvantaged persons.

The CAB is a Federal Advisory Committee Act board, chartered to provide advice to the U.S. Department of Energy (DOE) Office of Environmental Management. In addition to DOE, the Environmental Protection Agency (EPA) Region IV, the South Carolina Department of Health and Environmental Control (SCDHEC) and the Georgia Department of Natural Resources are represented on the board in an ex-officio capacity. The CAB uses issues-based committees to focus on various topics. They are:

- Strategic and Legacy Management
- Waste Management
- Facility Disposition and Site Remediation
- Nuclear Materials

Although there are a variety of issues of interest to the CAB, there are limits to available time and resources. The purpose of this Work Plan is to establish priority issues for each of the committees, and therefore for the CAB. It allows all Board members to be involved in setting the direction of the CAB, even for the committees of which they are not members.

The Work Plan covers the current calendar year. The committee chairs will strive to structure their activities to focus on the priority issues. It is understood that other issues may present themselves, resulting in deviation from the Work Plan. Deviating from the Work Plan is at the discretion of the committee chairs, however, they should inform the CAB when this is required.

ACRONYM LIST

ARP	Actinide Removal Process
BRP	Burning Rubble Pit
CAB	Citizens Advisory Board
CIF	Consolidated Incineration Facility
CRMP	Cultural Resource Management Plan
CSSX	Caustic Side Solvent Extraction
D&D	Deactivation & Decommissioning
DDA	Deliquification, Dissolution and Adjustment
DOE	Department of Energy
DWPF	Defense Waste Processing Facility
DUS	Dynamic Underground Stripping
EE/CA	Engineering Evaluation/Cost Analysis
EIS	Environmental Impact Statement
EM	Environmental Management
EPA	Environmental Protection Agency
ES	End State
FFA	Federal Facility Agreement
FY	Fiscal Year
KAMS	K-Area Material Storage
LCS	Low Curie Salt
LLW	Low Level Waste
MCU	Modular Caustic Side Solvent Extraction (CSSX) Unit
MOX	Mixed-Oxide Fuel
NASA	National Aeronautics and Space Administration
NM	Nuclear Materials
NRC	Nuclear Regulatory Commission
NRDC	Natural Resources Defense Council
PA	Programmatic Agreement
PAOU	P-Area Operable Unit
PMP	Performance Management Plan
RCRA	Resource Conservation Recovery Act
SCDHEC	South Carolina Department of Health and Environmental Control
SHPO	SC Historic Preservation Office
SL&M	Strategic & Legacy Management
SRS	Savannah River Site
SRNL	Savannah River National Laboratory
SWPF	Salt Waste Processing Facility
TRU	Transuranic
WD	Waste Determination
WM	Waste Management
WIPP	Waste Isolation Pilot Plant
WIR	Waste Incidental to Reprocessing
WOW	Waste on Wheels
WSRC	Washington Savannah River Company

ISSUES-BASED COMMITTEE DESCRIPTIONS

Strategic and Legacy Management Committee

The Strategic and Legacy Management (SLM) Committee is involved in strategic issues relevant to the future of SRS. This includes long-term policy, planning and other "cross cutting" issues related to other CAB committees. Its work includes many programmatic topics. Specific areas of interest are development and deployment of technology, the SRS budget decision-making process, future land use, legacy management/long term stewardship, historic preservation and relevant national environmental policy. It encourages other CAB committees to integrate the notion of long-term stewardship into issue deliberations and CAB recommendations.

Waste Management Committee

This Committee addresses the treatment, storage and disposal of various waste streams, including transuranic waste (TRU), low-level waste (LLW), mixed low-level waste (MLLW) and high-level waste (HLW). They do this with the goal of reducing the highest risk to the public, workers, and the environment. Two important goals of the committee are to facilitate an effective and mutually cooperative working environment between the DOE/SRS and the respective state regulatory agencies and influence DOE to pursue a more integrated and comprehensive systems approach in its decision making process to include all risks, costs, and safety concerns associated with the various options involved with the decisions affecting SRS.

Facility Disposition and Site Remediation Committee

This Committee addresses the remediation of contaminated areas at SRS and addresses the various types of waste units, groundwater and surface water contamination. The Committee deals with issues related to the Federal Facility Agreement (FFA), risk management/risk assessment, funding, the regulatory process and other cross cutting issues that pertain to environmental restoration. The Committee also follows deactivation and decommissioning (D&D) actions taken to reduce risk and costs following a shutdown of an industrial, radioactive, or nuclear facility.

Nuclear Materials Committee

This committee was established to study issues that involve nuclear materials (generally uranium and plutonium) that have an impact on present or future SRS activities. Issues include spent nuclear fuel program activities (foreign and domestic), nuclear materials management and nuclear materials integration. The committee addresses the consolidation, storage and disposition issues related to the legacy materials that were once part of the nuclear weapons production cycle that are no longer needed for their original purpose, but are not considered waste.

SRS CAB 2006 PRIORITY LIST

This Priority List is the result of a survey taken of the CAB members at the January 2006 CAB meeting in Hilton Head Island, South Carolina. The CAB members were given a list of 16 issues identified as priorities by the individual issues-based committees. The members were asked to rank the issues in order of their personal priority, with 1 being their highest priority and 16 being their lowest priority. The results of the survey were used to establish the list of issues described below in order of priority ranking.

1. Tank Closure

The WM Committee will closely follow progress of the Tank Closure Waste Determination and permitting to close tanks; the Waste on Wheels (WOW) program and annulus cleaning. Waste Determination documents for Tanks 18 and 19 have been drafted and transmitted to the Nuclear Regulatory Commission (NRC) and their consideration required by the National Defense and Authorization Act Section 3116 is on going. Following NRC approval, DOE, EPA and SCDHEC approval of the SRS General Closure Plan and tank-specific Closure Module is also a perquisite to closure of Tanks 18 & 19 in accordance with PMP Gold Metric and the FFA. The FFA commitment dates have been revised to October 31, 2006, (Tank 19) and February 28, 2007, (Tank 18) and are at risk due to the WD approval delays.

Testing and installation of the WOW submergible pumps was completed on Tanks 5 and 6. Tank 5 slurry pump operation was successful and Tank 5 has undergone the first waste removal using the WOW technology. Tank Annulus are hard to reach and pose a challenge when it comes to removing waste. Many tanks have no waste in the annulus and will not require annulus cleaning. Waste removal activities, such as rewetting of solidified waste, could reactivate inactive leak sites, thus increasing the inventory of waste in the annuli of these tanks. The need for annulus cleaning will be evaluated on a tank-by-tank basis after waste removal and a final decision made, with stakeholder and regulator input, at that time.

2. Integrated Plutonium Disposition

The NM Committee will follow activities related to integrated plutonium disposition including disposition of plutonium not suitable for the Mixed Oxide (MOX) Fuel Program; plutonium storage and surveillance at SRS; and the Environmental Management (EM) vision on plutonium. The NM committee will also follow the DOE Nuclear Materials Disposition and Consolidation Coordination Committee's activities as it relates to SRS. The committee wants to ensure adequate and sustained funding for plutonium disposition.

Changes to the Surplus Plutonium Disposition Program during FY'02 led to the cancellation of the proposed Immobilization facility. That decision left DOE/EM with the responsibility to determine a new disposition path for plutonium not suitable for MOX. The specific disposition path for this nuclear material has not been determined, but a proposed strategy is expected in the coming year. The safe storage of plutonium is ongoing at the K Area Material Storage (KAMS) facility. Activities to complete the design and initiate construction, in K-Area, for the surveillance capability are expected in 2006.

Teams formed by DOE have studied methods to expedite the disposition of all EM nuclear materials including plutonium management. Cost effectiveness and security aspects of plutonium management are some of the issues that are being evaluated and while no decision has been made, the committee will continue to monitor to see how SRS plays a role in the future.

3. Salt Waste Processing Facility
The WM Committee is interested in funding approval and schedule for this facility. Preliminary design is underway and was delayed pending resolution of seismic requirements. This facility will prepare high activity salt waste for disposal at the Saltstone Facility and the Defense Waste Processing Facility (DWPF). WSRC /DOE's modified salt processing strategy which forecast the quantity and timing for tanks that will be processed via Deliquification, Dissolution, and Adjustment (DDA) /Actinide Removal Process (ARP)/ Modular CSSX and Salt Waste Processing Facility (SWPF) is being re-examined with delays in the SWPF.

4. Salt Process (SWPF, DDA, ARP, MCU)
The WM Committee will closely monitor activities regarding the DDA Permit for Salt; the critical path schedule and tank space management. SRS activities supporting the processing and disposal of salt waste from the high level waste system are key to the accelerated cleanup strategy. Delays in approval of the waste disposal permit for the Saltstone facility and delays in waste disposition document approval has impacted SRS's ability to treat and dispose of salt waste. The DDA program commenced in late 2002, and was in suspension due to the WIR lawsuit. The program to restart in 2005 by dissolving three batches and transferring the DDA solution to Tank 49 remains waiting on Waste Determination (WD) and permit approval. The first phase of ARP has been installed in an existing facility at SRS formerly referred to as the Late Wash Facility (Building 512-S). The salt waste processed by the ARP will be transferred to the Modular CSSX Unit for cesium removal. Design was started in 2004 for a Modular Caustic Side Solvent Extraction Unit to remove a portion of the cesium before the waste is transferred to saltstone for final disposal. Construction activities are underway. The MCU is expected to be operational in mid-2007.

5. Deactivation and Decommissioning (D&D)
The FD&SR Committee continues to follow D&D activities, in particular the beginning of P Reactor completion efforts, including the potential use of the reactor building for the consolidation of contaminated materials. This closure will lead the way for the manner in which other SRS reactor areas will close. Deactivation includes actions taken to reduce risk and costs, following shutdown of a facility. A resulting condition of deactivation can be safe storage. Safe storage is defined as a low risk/low cost condition of a facility following deactivation while waiting decommissioning. It is not considered an end state but can be an appropriate long-term condition.

Decommissioning includes actions that are taken to place a facility in its final end state. The end state of a facility involves two choices, either demolishment or entombment. SRS continues to accelerate its D&D activities in 2006. The CAB is interested in the Engineering Evaluation / Cost Analysis (EE/CA) for the following areas, (211-F Canyon Outside Support Facilities, 211-3F Truck Unloading Shed, and 221-1F A-Line). Other ongoing activities are: 247-F Naval Fuels Facility, 321-M Manufacturing Building, 305-A Test Pile Building, D-Area Facilities, and Various G-Area Facilities. The CAB is also interest in F Area Materials Storage Building Decontamination of Pu238 and F Canyon Decommissioning planning.

6. Spent Fuel Storage and Disposition
The NM Committee plans to monitor the evaluation of nuclear materials and a suitable disposition strategy for spent nuclear fuel. The committee wants to ensure adequate and sustained funding for disposition. The EM team evaluating nuclear materials will determine a suitable disposition strategy for Spent Nuclear Fuel in the near future. In the meantime, SRS continues to receive foreign and domestic fuel in L-Basin for safe storage of Spent Nuclear Fuel awaiting its final disposition.

7. Budget Development/Gold Metric
Assuring SRS has adequate funding and that the money is allocated to perform work that is sequenced to reduce risk posed to public health, worker safety, and the environment is of utmost interest to SRS stakeholders. For stakeholder opinions to be of any consequence, early involvement in the budget formulation process is required, and this requires that the CAB closely monitor progress against DOE-approved work schedules, key performance indicators, and annual financial reports.

8. Solid Waste
The WM Committee will continue to monitor Solid Waste Program activities including the Transuranic (TRU) Waste Program, PUREX and wastes with no path for disposition. Shipments of TRU waste to the Waste Isolation Pilot Plant (WIPP) began in 2001. Drummed waste is now being shipped to WIPP using temporary or existing facilities to prepare and characterize the waste. Approximately half of the 30,000 TRU waste drums have already been shipped to WIPP. High activity TRU (mostly Pu238 wastes) and non-drummed TRU waste remains a challenge, but innovative approaches are being explored for a cost-effective means to prepare these wastes for shipment.

9. Defense Waste Processing Facility
The WM Committee will follow progress at DWPF to ensure no shutdowns. Final processing for the highly radioactive washed sludge and high activity fraction of the salt waste occurs at the DWPF facility. In a complex sequence of carefully controlled chemical reactions, waste is blended with glass frit and melted at 2100 degrees Fahrenheit to vitrify it into a borosilicate glass form. The resulting molten glass is poured in stainless steel canisters. As the filled canisters cool, the glass solidifies, immobilizing the radioactive waste within the glass structure. These cans are then permanently sealed and decontaminated. They are being stored on an interim basis on-site in a Glass Waste Storage Building, pending shipments to a Federal Repository for permanent disposal.

10. Other Soil and Groundwater Closure Projects
The FD&SR Committee recognizes the value of continuing cleanup of operable units at SRS. It will follow all ongoing major cleanup efforts, i.e. F&H Groundwater, Western Sector DUS, Phytoremediation, and the final closure of the GSA Consolidation unit that will include the Old Radioactive Waste Burial Ground.

11. H Canyon Utilization
The NM Committee plans to continue to monitor appropriate utilization of H Area's capability for any new missions that support cleanup. The committee wants to ensure adequate and sustained funding for H Canyon. The eventual shutdown date for H-Canyon is dependent, in part, on a determination of the need for H-Canyon to stabilize and/or disposition any additional materials. H-Canyon is able to dissolve and process significant quantities of enriched uranium including material that is highly enriched. H Area can also handle plutonium and uranium oxides, metals/pellets, and neptunium targets. The committee is expected to continue to monitor appropriate utilization of H Area's capability for any new missions that support accelerated clean-up throughout the DOE complex.

12. Area Closure
The FD&SR Committee is particularly interested in Area Closure Progress. The T-Area Record of Decision has been issued and remediation is scheduled for completion in 2006, with M-Area following soon thereafter. The schedules will be reviewed by the committee as a sounding board for further CAB input.

13. Regulatory Matters
The FD&SR Committee is interested in the ultimate delivery of appendix K of the FFA. The committee wants progress input on K, and how it relates to the area closures that are moving forward at the SRS. Appendix K will integrate D&D efforts with related Soil and Groundwater Closure Projects. The Committee will also continue to follow Appendix E, the legally binding cleanup schedule.

14. Technology Development
Technology development at SRNL and SREL is of critical importance to reducing costs and finding new methods for environmental cleanup. Technology development is of critical importance to reducing costs and finding new methods for environmental clean up. With accelerated cleanup a main driver for the DOE Complex, new and different technologies will become increasingly required to meet these demands and reduce costs. Technology development is also increasingly important in those instances where there is no safe or effective current technology available to address contamination and disposition problems as DOE sites move to closure.

15. SRS Planning Documents
The Committee will be looking at all SRS planning documents included in the Site Utilization Management Plan (i.e. EM Performance Management Plan, End State Vision, 10-Year Site Plan, etc…) to ensure integration of thought and activity and render advice as needed. SRS stakeholders commented on the 2002 and 2004 versions of the *SRS Environmental Management Program Performance Plan* (PMP), which describes the approach for completing the EM mission at SRS by 2025. The PMP focuses on reducing risk and accelerating the original work schedules, which will reduce the cost of cleanup at SRS. This emphasis of reducing risk and accelerating cleanup requires adopting new methods and ways of doing business to advance the cleanup program. The *End State Vision* is intended to describe DOE-SR's cleanup vision as driven by well-defined, risk-informed end states. Remediation will be defined to achieve end states as agreed upon with SCDHEC and EPA as appropriate and with stakeholder input.

16. Historic Preservation
The SLM Committee is interested in investigating alternative funding sources for historic preservation and closely following these project activities. DOE, the South Carolina State Historic Preservation Office (SHPO), and the Advisory Council on Historic Preservation (the Council) have developed a Programmatic Agreement (PA) and Cultural Resources Management Plan (CRMP) for the management of Cold War Historic Properties on the Savannah River Site (SRS). While these documents are final, the Strategic and Legacy Management Committee will continue to monitor the actions directed in the PA and CRMP as well as the intentions. The CAB will have membership on the Historic Preservation Tourism Team. Included in the public stakeholder initiative is the development of a museum or visitor center at or near SRS.